MUNICIPAL PROFILE as Instrument for Local Strategic Planning

Definition of sustainability

In the HABITAT II, the UN Summit on Cities in June 1996 brought several considerations about sustainability. Sustainability is equity and harmony extended into the future, a careful journey without an end- point, a continuous striving for the harmonious co-evolution of environmental, economic and socio-cultural goals. Therefore a sustainable municipality is one which succeeds in balancing economic, environmental and socio-cultural progress through processes of active citizen participation. All municipalities are now confronted with the challenge of considering economic, social and environmental issues simultaneously and constantly readjusting the balance. An unusual definition for sustainability is that sustainability is a striving for eternal youth. It is a continuous invention of new opportunities, resembling youth itself, a capacity for innovation which is a non-depletable resource, a permanent thirst for the unknown, the search for something better. All these issues were at the very heart of.

The HABITAT agenda was based on principles of equality, eradication of poverty, sustainable development, liveability and diversity, family, civic engagement and government responsibility, partnerships, solidarity and international co-operation and co- ordination. It set out recommendations and concepts, it laid down a basis for substantive input from local authorities, the public and private sectors, NGOs and professional bodies; it emphasised the important role of private individuals and market forces. Several key points of consensus emerged: the economic, social, political and environmental futures of the Earth will depend on how urban issues are addressed; the roles of government decentralisation and of non- public actors are of increasing importance; local and national institutional and financial capacities have to be strengthened to address urban issues; most financial and technical resources have to originate from countries, cities and communities themselves. Finally, best practices and indicators were highlighted as the most innovative instruments towards urban sustainability.

Nowadays the municialities of the world face various serious challenges. In the last two years the focus is on pandemie of Covid and on consequitive and parallel economic crisis or recesion. However, far more serious chalenges are awaiting the humanity : the global climate changes and their impact on life in Earth. The failure to address these challenges may lead to wars, disturbances, natural distasters, famine and more deaths than are the combined number of victims of the current pandemie. It is more and more clear that new economic, social, society arrangement and wealth distribution models have to be find, developed and introduced. In 19th century the sanitary changes in municipalities (like waste disposal, safe drinking water, deratisation) led to the elimination of plague, chollera and other communication diseases. The role of the current municipalities is different however equally important : based on public consensus support and engagement find, develop and introduce sustainable development strategies. Despite several UN and global initaitives like HABITAT, Rio Global Forum, Local Agenda 21, various networks of local municipalites (Eco-cities, Eurocities, Healthy Cities, ICLEI cities for local sustainability), The agenda of sustainability, on contrary of "eternal economic growth" is still not on the daily program or agenda of political representations, parties and governments of all levels.

The human history and development of humanity is based on many determinants. Philosophers discuss the role of a single person in the society, the role of accidental discovery, curiosity, the role and impact of natural and super-natural powers. A lot of inventions and discoveries where based on simple curiosity "what if..." or on repeated actions and failures. With complexity of the human activities, with industrial and IT revolutions the significance of planning processes became crucial. Nowadays, the municipalities that not so long ago participated in achievements of communism type "5years plans" that were fulfilled on 100%, are challenged and asked to introduce strategic planning and recently even global warming

prevention and impact mitigation planning. New planning tools and methods were designed and developed and enforced through legislation into the life of municipalities. The mayors learnt about SWOT analysis, strategic and action plans, projects and their management. Most of the appropriate planning activities and approaches start with the local analysis. It is crucial to know where we start, what goals do we wants to achieve and what changes and differences we achieved. Many various initiatives, European and global programs and networks started to develop indicators.

Indicators

"Indicators are selected to provide information about the functioning of a specific system, for a specific purpose — to support decision-making and management. An indicator quantifies and aggregates data that can be measured and monitored to determine whether change is taking place. But in order to understand the process of change, the indicator needs to help decision-makers understand why change is taking place."

The Commission's European Sustainable Cities Report (EC 1996a) recognises the need for sustainability indicators as tools for quantifying sustainability performance. If sustainability is a coherent policy goal, it must be possible to measure whether we are moving towards it. The World Bank defines indicators as performance measures that aggregate information into a usable form, highlighting, however, the unresolved issues of fluctuation, intertemporal variations and uncertainty. All organisations involved in indicator construction seem to agree that indicators provide a useful tool for policy making (prospective) and for assessing policy implementation (retrospective indictors), but they stress their limitations (World Resources Institute 1994).

The magnitude and significance of sustainability indicators has received much attention in recent years, but their real use in measuring urban sustainability performance is at an initial stage. Descriptive indicators, illustrating the status of the environment and based on real, concrete physical measures, are more easy to establish and interpret by judging them against specified benchwork and thresholds. Performance indicators are based on policy principles and goals. Indicators are meaningless without specified objectives and they cannot contribute to the improvement of the urban quality of life if there is not a policy framework, based on a diagnosis of the current situation, recognising that some facts should change and giving directions for change and objectives (and, if possible, ultimate targets) to be attained.

All organisations involved in the development of indicators seem to agree that the significance of indicators extends beyond that which is directly obtained from observations and that they should be clear, simple, scientifically sound, verifiable and reproducible. Urban indicators cannot include solely environmental indicators, as environmental performance is not the only factor in achieving a city's sustainability. Socio-economic issues play a critical role and socio-economic indicators are necessary

The required properties of indicators are that they should be significant, should aid in comparison, evaluation and prediction, and should help to construct and harmonise data banks, and decision-making at various levels to promote local information, empowerment and democracy. They should also contribute to making the city more visible and transparent and have, if possible, a symbolic role. They should embrace all sectors and neighbourhoods contributing to the co-evolutionary process of sustainable development. As with all innovations, the development of indicators is strengthened by the existence of a permanent innovative milieu. Seattle, in the USA, is often quoted as a classic example of a dynamic city with a coherent set of indicators.

Indicators can more precisely measure pressure, state or policy, but in a dynamic situation what really matters is the "ultimate state". A policy, no matter how good or sustainability-oriented, will not be efficient if the result is far from the goal (owing, that is, to the initial state or an unrealistic target).

Indicators can measure the success of one course of action and even stimulate action, but they do not indicate what kind of action. Decision-makers, citizens and inhabitants have at their disposal a large choice of instruments for urban intervention and good practice guides can inspire them. Targets for thematic indicators may be defined at the city level, according to the priorities of each city. The performance of a city at a national or supranational level should therefore be judged according to both its targets and the progress achieved in this respect.

Important considerations for using indicators

- Without good data, based on monitoring, it is not possible to develop indicators.
- Performance measures imply that targets need to be set (i.e. against which performance can be compared).

- Different people living in different places have different values. Indicators must therefore be able to take into account different locations, people, cultures and institutions.

- Sets of indicators evolve over time.
- Sets of indicators are seldom, if ever, complete. - Measurement of indicators tends to reduce uncertainty, but does not eliminate it.
- Indicators can play an important role in how human activities influence the environment — changing the indicators will most likely also change the system.

Source: Food and Agriculture Organization of the United Nations, 2002

Some researchers have observed that EU indicator systems put little focus on social and governance aspects of sustainable development (Adelle & Pallemaerts, 2009), while others say that social and economic considerations are under-represented (Lynch *et al.*, 2011). Almost all indicator sets and indices place an emphasis on the environmental aspect of sustainability, sometimes to the detriment of the other categories (Shen *et al.*, 2011). Generally speaking, and importantly, most indicator sets do not capture how the pillars of sustainability are linked (Adinyira, Oteng-seifah & Adjei-kumi, 2007).

Less fundamental issues faced when choosing an indicator set include standardisation and data availability. As performance assessment is one of the main purposes for using sustainability indicators, it is important to be able to compare performance between similar urban areas. In this way, indicator sets can be validated and improved, shedding light on complex and abstract policy issues (Yigitcanlar & Lönnqvist, 2013).

Data availability is another important aspect to consider when selecting an indicator system. These frameworks are designed by a range of groups and individuals, such as government agencies, non-governmental organisations and universities, to name a few (Sébastien & Bauler, 2013). The result is that there is often little or no consideration of what data is readily available when the indicator set is proposed. City Blueprints is a classic example: despite explicitly planning the indicator set around publically available data, they struggled to obtain the data required to complete the assessment of Rotterdam's water sustainability (van Leeuwen *et al.*, 2012). Pires *et al.* (2014) cite unsuitable or unavailable data sources as one of the most common failings of indicator systems.

It would perhaps be valuable at this point to discuss what aspects of indicator systems are desirable. One thing that is widely agreed upon is that indicator sets need to be locally-relevant — they need to work at the scale (size, physical lay-out, and organisational structure) of the city

or municipality (Campbell, 1996; Camagni, 2002). The indicator framework chosen must reflect the geographical and social context of the urban area in question (Moreno Pires, Fidélis & Ramos, 2014; Hiremath *et al.*, 2013).

Another important observation is that indicators with broad political support have been more successful than those proposed by academic institutions or non-government agencies (Hiremath *et al.*, 2013). Logically, this is because indicators are selected to inform policies that are defined by policymakers; the argument is that policymakers, along with those who are affected by these policies, are in the best position to predict the potential success and sustainability of new regulations and interventions.

Mega and Pedersen (1998) suggested that indicators should be clear, simple, scientifically sound, and reproducible. Cash *et al.* (2003) define three criteria for the usability of any given indicator: salience, credibility and legitimacy. Zavadskas *et al.* (2007) in turn suggest that a set should be "well-founded, limited in number, broad in coverage of Agenda 21 goals, obtainable at a reasonable cost–benefit ratio, using data published officially, and must be able to reflect every aspect of urban development." Finally, Hiremath *et al.* (2013) suggest that indicators should be "policy relevant, scientifically founded, readily implantable, and useful for planning purposes."

Municipal Profile

One of the products that use and benefit from the Indicator preparation process is the Municipal Profile. The purpose of the profile is both enbakle and help the strategic planning process and also inform the citizens, visitors and potencial partners, investors interested to cooperate with the municipality. Based on the initial purpose of the Profile there exist several variants: The one for the visitors and potencial investors may be shorter, in practical print form (leporelo, leaflet or fact sheet) containing attractive and required infoirmatioin for the final users. The version for citizens may highlight the history, services, quality of life, access to sport and leisure time areas, quality of natural environment and safety conditions. Specific versions of profile may serve the health promotion and social (labour) opportunity needs.

MUNICIPAL PROFILE – OUTLINE PROPOSAL

Introductory chapter

- location, area, natural conditions, significant elements, ..

A. Social Sphere

1. Population

2. Housing

3. Civic equipment, Comunity and hobby activities

4. Health and Security

Specifics, summary

B. Environmental Sphere

1. Transport infrastructure

2. Technical infrastructure

3. Environment

Specifics, summary

C. Economic Sphere

1. Business and Employment

2. Industry

3. Agriculture

4. Services

Specifics, summary

Quantifiable indicators

INTRODUCTORY CHAPTER

1. **Introduction**

   Some Indicators of the introductory chapter are given for the posibility of comparison of other indicators (eg for conversion of the item per area or per capita) - it is therefore not possible to clearly interpret whether higher values mean favorable or unfavorable characteristics

   - **Area** (given in km2 sometimes in ha in small areas);
   - **Population** - current (most recent) population of the relevant territory (usually as of 1 January of the given year)
   - **Population density** - calculation indicator - number of inhabitants per 1 km2 of the relevant territory

2. **Location**

   - **Belonging to a superior territorial unit** (municipality union - LAG - district - region – cohesion region - state - Europe), location within the world side
     The indicator shows the location and position of the territory within a larger territorial unit.
   - **Distance from major cities, highways, borders**, etc. (the data is usually given in km, but it is also possible to use the time in minutes);

It is possible to find out from any map (eg the czech portal mapy.cz calculates including the type of means of transport)

The indicator shows the traffic availability of a territorial unit (most often a municipality). The lower the value of the indicator, the more accessible is the area and usually more attractive.

- **Altitude** (given in m)

  The indicator characterizes the surface of the area - higher altitude indicates difficult agricultural conditions and at the same time worse transport accessibility, on the other hand, the area may be more attractive for tourism

3. Natural conditions

- **Relief (surface)** - the existence of important mountains, lowlands, etc. in the area
- **Water** - the existence of important rivers, ponds, lakes, dams, etc. in the area
- **Climate** - belonging to the climate zone, basic characteristics of the climate
- **Size of forests, water areas, built-up areas, agricultural land, others** - is given in% of the total area;

  The indicator shows the composition of land types in a given area - diversification is advantageous for the area, ie the composition of all types of surfaces with the exception of disturbed areas.

Regional specifics, summary

This paragraph always summarizes the findings of the indicators that were monitored in the relevant chapter. Specifics are emphasized - significantly higher or lower values of indicators than is usual in comparable territories and the resulting initial situation in the territory.

A. SOCIAL SPHERE
1. Population

- **Population** (absolute data) - *current (most recent) population of the relevant territory (usually as of 1 January of the given year)*

  The value of the indicator cannot be interpreted separately, whether it is favorable or unfavorable - it is given for comparison of other indicators (conversion of value per 1 inhabitant).

- **Number (percentage share) of men / women -** % of the total population.

  The optimal value of the indicator is around 50% of men and women.

  Number (share) of population under 15, 15-64 and 65+ - % of the total population

  The indicator shows the age of the population, optimum is high representation of both younger components which indicates both future population growth (higher representation of children under 15) and a higher share of the working population (greater representation of people aged 15-64). On the other hand, a higher proportion of the population over the age of 65 may mean improved mortality rates and longer life expectancy.

- **Index of age / youth, economic activities** - Mutual shares of three age groups (per 100 inhabitants).

  Synthetic indicator calculated from the proportion of individual population groups. Its interpretation is similar to the previous indicator)

- **Development of the number of inhabitants** - total increase / decrease - the difference in the number of inhabitants at the beginning and at the end of the observed period (absolutely), or index, ie the difference related to the population at the beginning of the period and multiplied by 100;

  The indicator monitors the increase / decrease of the population during a certain period. Natural movement is influenced mainly by the age structure of the population, migration is influenced by the attractiveness of the area and by the housing stock equipment. Usually the most favorable is the long-term slight increase (in some cases even stagnation in development) without significant fluctuations on both sides.

- **Natural increase** - the difference between the number of births and deaths during the observed period;
- **Migration increase** - the difference between the number of immigrants and emigrants during the observed period;
- **Population structure by education** - number of persons older than 15 years with selected types of education (primary school, secondary school without GCSE / with GCSE, university) from the total population.
  Higher education means better possibility of employment. On the other hand, especially in recent years, there is a more frequent demand for some types of crafts that do not require a high school diploma and for the students of crafts schools.
- **Life expectancy** (so-called life expectancy) - number of years that a person born in a given year will aproximately live (men / women)
  The aim is to increase life expectancy as a whole, but above all life expectancy in good health condition - but this indicator is difficult to monitor.
- **Total number of households and their composition in%** - complete families, incomplete families (including with / without children, households of individuals, non - family house.)
- **Development of the structure of individual types of households**
  The quotient of complete families with children has been declining for a long time, all other categories are increasing.

2. Housing
- **Total number of houses / flats** - absolute figure;
  The basic indicator is usually given for the posibility of comparison of other indicators (conversion of the value to 1 house / apartment).
- **Number of inhabitants per 1 house / flat** - ratio of population and number of houses / flats; (%);
  The indicator shows the population of houses / flats. In the case of a higher value for houses, it indicates a higher proportion of apartment buildings. In the case of a higher value for dwellings, it may mean unfavorable characteristics, however, other indicators, such as the structure and area of dwellings, still need to be monitored.)
- **Proportion of family / apartment houses (flats**) -% ratio of flats in family, apartment houses and other buildings from the total number of occupied flats.
  The quotient of family houses is the highest in small municipalities, decreases with the growing size of the municipality .
- **Age of flats, area, room** - period of construction of houses; average living / usable area of dwellings (m2); number of rooms in the apartment.
  The indicators monitor the more detailed characteristics of the flats and thus specify the equipment of the flats. Newer and larger flats are qualitatively better in terms of housing stock.
- **Technical equipment of the dwelling** - number / number of dwellings equipped with gas, water supply, sewerage, toilet and bathroom from all dwellings in total.
  The higher the value of the indicator, the better is the quality of housing in the area. Data have not been collected in the Czech Republic in recent years, full equipment is supposed.
- **Legal use of a flat** - number / percentage of flats in personal, cooperative ownership, rental flats, flats of a private owner and number of flats in family houses from all flats in total.
  There is a more diverse representation of all types in large cities.
- **Housing construction -** number of newly built dwellings per period of time, the so-called **intensity of housing construction can be calculated**, ie the number of newly built dwellings (usually per year) per 1000 inhabitants

The housing construction intensity indicator is a basic indicator of housing attractiveness in each area. The higher the indicator is, the more significantly the number of inhabitants in a given area grows.

- **Ratio of family houses and apartement buildings from newly built dwellings in (%)** *monitors the percentage of residential / family houses, it can be compared over time*

3. **Civic equipment, Comunity and hobby activities**

   All indicators in this chapter express whether and how the municipality is equipped with the appropriate facilities. The more equipped the village is, the more attractive it is in terms of housing. At the same time, the location of these facilities in the territory has a great influence. By logic, it is not possible for every municipality to have all the civic equipment, but the accessibility of these facilities is important - they should not be at a long distance and at the same time they should be easily accessible by road. Good transport accessibility is necesary especially to basic medical facilities, social services, shops and schools.

   - **Number of municipalities** (or the ratiio of municipalities from the superior territorial unit) **equipped with medical facilities**.
   - **Structure of equipment of medical facilities** - *equipment with hospitals, pharmacies, practitioners, selected specialists, etc.*
   - **Capacity of the facility** - number of beds in hospitals, number of doctors, etc. - absolutely and also in number on 1000 inhabitants of the territory
   - **Number of municipalities** (or the ratio of municipalities from the superior territorial unit) **equipped with social care facilities**.
   - **Structure of equipment of social care facilities** - *homes for the elderly, nursing homes, etc.*
   - **Capacity of the facility**.
     Number of beds in the facilities soc. care, number of social workers, etc. - absolutely also in number on 1000 inhabitants of the territory
   - **Number of municipalities** (or the ratio of municipalities from the superior territorial unit) **equipped with cultural facilities**.
   - **Structure of equipment of cultural facilities** - *libraries, theaters, galleries…*
   - **Number of municipalities** (or the ratio of municipalities from the superior territorial unit) **equipped with sports facilities.**
   - **Structure of equipment of sports facilities** -*playground equipment, gyms, stadiums…*
   - **Number of municipalities** (or the ratio of municipalities from the superior territorial unit) **equipped with catering facilities**
   - **Number of municipalities** (or the ratio of municipalities from the superior territorial unit) **equipped with retail facilities** (especially grocery stores).
   - **The structure of the equipment of retail facilities**.
   - **Number of municipalities** (or number of municipalities from the superior territorial unit) **equipped by post.**
   - **Number of municipalities** (or the ratio of municipalities from the superior territorial unit) **equipped with educational facilities**.
   - **Structure of equipment of educational facilities** - *equipment of kindergarten, primary school, upper school level…*
   - **More detailed characteristics of schools** (can be monitored individually, but also in summary for kindergartens, primary schools, high schools in the relevant area) - types and capacities of schools, numbers of pupils, numbers of classes.
   - **Existence of scientific and research institutes in the territory**
   - **Association activities** - number of active associations in municipalities

- **Number of inhabitants** (or ratio of inhabitants in% of the total number) **who are members of the associations**

4. Health and Security

The common goal of safety indicators is the lowest possible values, whether crimes, offenses, number of accidents, fires or, for example, the degree of flood activity.

However, it is also possible to monitor preventive measures – in this case, on the contrary, the goal will be the highest possible numerical value of indicators (number of police officers, security actions, activities for safer transport, anti-flood measures…)

- **Health :**
  - **- Number of available local health and social services (** e.g. hospitals, MD ambulances, homeless shelters, socal care / elderly houses)
  - **- Number of beds / places in above mentioned health and social facilities**
  - **- Number of inhabitants with serious health problems (cancer, stroke, heart attack)** (local people suffering from serious / fatal health problems) - if available or significant
  - **- Percentage of un-vaccinated population (not only Covid + Covid)** - number of anti-vaxers or people refusing collective protections (except MD recommended cases)
  - **- Percentage of Covid victims in local population (**Number of dead casued by lung or other serious form of Covid)
  - **- Percentage inhabitants experienced / survived Covid (**Number of survivors recovered from Covid) **- rate of infestation**

- **- War :**
  - **- Number of refugees accommodated in public + private facilities.** (comparing to Number of ingabitants ?)
  - **- Number of war refugees employed locally.** (refugees who foudn local job)
  - **- Number of refugee children attending local schools**
  - **- Number of facilities able to provide help for refugees (lodging, catering, jobs, health, spocial services)**
  - **- Percentage of refuggees living in population**
  - **- Number of conflicts, crime cases of refugess or due to presence of refugess**
  - **- Number of violent attacks of refugess**
  - **- Unemployment increase percentage due to war**
  - **- Poverty growth related to war (loose of jobs, increased prices of food, fuel, energies)**

- **Crime** - number of crimes in the territory in total, number of offenses, structure of crimes and offenses, development, clarity of crimes.
- **- Traffic accidents** - numbers of traffic accidents on the relevant road,
- **- Fires -** total number of fires (or per 1000 inhabitants) per year
- **- Floods -** flow (m3 / hour), from which the derived indicator - how often the given flow / profile reaches the appropriate level of flood activity
- **- Other natural disasters -** number of events per year caused by individual natural disasters (wind, snow / frost, drought)
  For all indicators, it is possible to monitor the total harm (in CZK) caused by individual events, as well as the number of victims or injured persons.

Regional specifics, summary

B. ENVIRONMENTAL SPHERE

1. Transport

Within transport, we monitor indicators of transport infrastructure (roads and their length) absolutely and in terms of area, and then indicators of transport services (connections and their numbers) and passenger numbers. Sufficient length of roads mainly affects (improves) the quality of individual transport, the number of connections then has an impact on public transport.

- **Length of various types of roads** - it is possible to monitor cycle paths and cycle routes, motorways, roads (including I., II. and III. classes) and railways (including multi-track, electrified) in the monitored area;
- **Density of roads** - the ratio of the length of individual roads and the area of the relevant territory (km / km2)
  The density of roads is largely related to the density of the population in the area. Higher density means better transport options, on the other hand it negatively affects the environment.
- **Existence of other transport facilities** - eg airport, port, cable car.
  Other modes of transport complement the basic transport network, especially the distance to the airport has a major impact on the development of the area
- **Number of public transport connections** - usually the number of connections per day / week of various types of means of transport (most often bus or train) that stops in a each area (municipality) is given. It is also possible to monitor the **existence, number of connections or travel time of each connections** to the district / regional / capital city.
  The aim is to have the best possible transport connections which means the greater satisfaction of inhabitants, but also a lower need of individual transport and thus a better environment.
- **Number of passengers** - number of transported persons in the means of transport, or number of transported persons per time unit (day, month, year). The derived indicator is **Occupancy of connections** (in%), ie the ratio of the number of transported persons and the capacity of individual connections
  The data would be interesting, but they are difficult to find, they can probably only be obtained from individual carriers

2. Technical infrastructure

The indicator of technical infrastructure equipment directly affects the interest in living in the given locality. Sufficient engineering equipment is now considered as the standard. At present, the coverage of the territory by digital technologies is becoming increasingly important, and the existence of alternative energy sources is an added value of the teritory.

- **Number of municipalities** (or the ratio of municipalities from the superior territorial unit) **that are connected to the basic engineering networks** - the number of municipalities connected to the public water supply, electricity, gas pipeline, sewerage (incl. WWTP);
- **Proportion of houses / flats** (in%) **connected to the relevant engineering networks** (of all houses / flats in the relevant territory)
- **Municipalities / houses covered by digital technologies** – number (ratio) of municipalities or area of territory or number of houses covered by the relevant mobile network, Internet operator or television multiplex
  Digital technology coverage is growing significantly, but there are still other technologies that can be monitored.
- **Territories / houses with alternative energy sources** - Number of alternative energy sources facilities - wind, hydro, solar, power plants, photovoltaic elements, biomass production facilities. It would be interesting to find out the number of objects connected to the listed devices, or their output or the share of their output in the total energy production in the area, but the data will be difficult to find.

- **Energy consumption in the household** - average consumption of water, heat, gas, electricity per person or household per year
  The indicator is gaining in importance especially in the recent period due to the energy crisis and a significant rise in energy prices

3. Environment

- **Air pollution -** immissions / emissions of CO, NOX ,, SO2, solid parts, or and others according to the stations of air quality measurement (always several in the region) for a period of time (year), the derived indicator is the **number of days in a year when the air pollution standard** was exceeded
  The goal is the lowest possible air pollution, fortunately this trend is fulfilled by using more environmentally friendly energy sources
- **Waste production** - the amount of waste in total or per 1 inhabitant, then the structure of waste (municipal, hazardous waste),
  The goal is to reduce waste production, but its production is rather growing.
- **Amount of sorted or recycled waste** (or its part of the total waste) - *here, on the contrary, the goal is to increase the persetage of sorted waste in the total waste production. This is partially being fulfilled.*
- **Climate** - average annual / monthly air temperature in the country, in the region or at individual stations, diference from the average air temperature
- **Average annual / monthly total precipitation** at stations in the country, in the region or at I stations, diference from the average total precipitation
  The average air temperature has been rising for a long time, while the total precipitation has rather decreased. The main goal is to stop the growth of the average air temperature indicator and also to reduce dramatic weather fluctuations
- **Water purity** - amount of waste substances in watercourses.
  The amount of waste substances in watercourses is rather declining in the long run, this favorable trend must be maintained.
- .**Protected areas** - Number and area (ha) of protected areas of categories - large-scale (NP and PLA) and small-area (natural monument, etc.),
  In CR up to the level of districts, then the share (representation) of protected areas in the relevant territorial unit can be calculated
- **Ecological stability coefficient** - The ratio of areas of so-called stable and unstable landscape elements in a given area. Stable elements include forests, permanent grasslands, orchards, gardens, vineyards, hop gardens and water bodies, unstable elements include arable land, built-up areas and other areas.
  The higher the value of the indicator is, the more stable the area and thus the more sustainable in terms of further development..
- **Species composition of forests** - ratio of individual tree species in% of the total forest area;
  Species diversity in the representation of forests is optimal.

Specifics, summary:

C. THE ECONOMIC SPHERE
1. Entrepreneurship and employment

- **Structure of economic entities** - composition of enterprises (in% of all enterprises) by predominant economic activity
- **Composition of economic entities** (in% of all enterprises) by number of employees
- **Number of entrepreneurs** - can be monitored absolutely or in terms of 1,000 economically active inhabitants of the territory.

The indicator monitors how active citizens are in terms of economic activity. Higher values indicate greater activity in the area.

- **Unemployment** - the absolute number of unemployed or in% from economically active people (unemployment rate).
  The unemployment rate is a basic economic indicator. The lower the value of the indicator is, the more economically stable the territory is, but below a certain minimum it means a shortage of skilled workforce.
- **Development of unemployment** - development of the percentege of unemployed people over time
- **Structure of the unemployed** - it is possible to monitor the number or ratio of all unemployed, eg by length (long-term unemployed), age (young / old unemployed), health status, gender, etc.
- **Number of vacancies** - absolute number of vacancies or number of job seekers per 1 vacancy.
- **Structure of employees** - number and ratio of employed person (in%) in individual sectors - primary (agriculture and forestry), secondary (industry and construction) and tertiary (other sectors); sometimes the quaternary (science, research, education) is set aside.
  Higher representation of persons working in the tertiary sector, or and the quaternary, means more economically stable and developed territory.
- **Departure for work** - ratio of commuters from the economically active population (%);
  The indicator shows job opportunities in the area, transport options and the willingness of residents to travel for work. If commuting predominates in the area, it is usually more attractive in terms of housing.
  It is also possible to monitor other indicators of commuting to work (commuting time, frequency) incl. individual municipalities, among which it takes place, the largest employers in the territory, etc.

2. Industry

- **Gross domestic product** - total GDP per inhabitant, GDP can be monitored according to economic activities
  It is the total monetary value of goods and services created during a given period (usually a year) in a certain territory and it is an indicator of the maturity of the state economy.
- **Composition of industry**. – proportion of each industrial sectors in the territory (engineering, chemical, food industry, etc.) in% of industrial production
  It shows the composition of the industry, a certain diversification is favorable.
- **Area of industrial areas by industry** - area (in km2) of industrial area for basic industries

3. Agriculture

Indicators from the field of agriculture show the expansion of agricultural production in the area and the way of farming. It is not possible to say unequivocally which values are optimal, because the extent and structure of agricultural production is largely determined by natural conditions. In yield indicators, the highest values of the indicator are usually the goal.

- **Area and portion of agricultural land** - area (in km2 or ha) or share (in%) of total agricultural land and each types of land - arable land, orchards, hop gardens and vineyards, grasslands and gardens.
- **Area of agricultural crops** - area under each crops (in ha) - cereals (wheat, rye…), legumes potatoes, sugar beet, industrial crops (rape, soya…), fruit, vegetables (various types namely)
- **Harvest of agricultural crops** - weight of harvested crops in total and individually - it is possible to determine the yield, ie harvest per unit area (in t / ha).
- **Number of animals** - Absolute number of each farmed animals in animal production - cattle, pigs, poultry.

- **Products of animal production** - number of milked milk (in l) or milk yield (l / 1 dairy cow), number of laid eggs (abs. or per hen), weight of processed meat (in t) of cattle, pigs or poultry

4. Services

Service indicators, resp. tourism have a dual meaning for the territory concerned. From the point of view of tourists, higher values of indicators bring better conditions for tourism, from the point of view of local people they improve the economy of the area. Therefore, the goal is a sufficient offer and a suitable structure of accommodation facilities and at the same time a sufficient number of vacationers, which determines the indicator of the number of accommodated persons.

- **Number of accommodation equipment** - number of all types of accommodation equipment in the monitored area. You can also monitor the number of rooms and beds in these facilities. the total number of beds then indicates the accommodation capacity of the monitored area
- **Structure of accommodation facilities** - number and ratio of individual types of accommodation facilities - hotels by number of stars (1-5), pensions, cottages, camps, etc.
- **Numbers of accommodated person** - usually the number of person who slept in the relevant accommodation facility for each day is given, in total the annual number is usually given
- **Utilization of accommodation capacities in the territory** - given in% - the indicator can be calculated from the number of accommodated person for a period of time (usually a year) and the total capacity of beds in accommodation facilities in the monitored area.
- **Other services** - number of establishments of other services (hairdressers, repair shops, etc.) in municipalities; can also be calculated per 1000 inhabitants of the municipality or other territory. *The indicator is important for residents, the higher the value, the more attractive the area for housing.*
  Specifics, summary:

Others

- **Coverage of the given territory by microregions, LAGs, etc**. - membership of municipalities (absolutely or in% of the given territorial unit, eg region) in microregions, LAG, Euroregion, etc. *Higher values mean a better degree of cooperation of the respective territory.*
- **Territorial coverage by spatial plans** - what is the spatial planning documentation of large territories of units, spatial plans of municipalities (including their actuality), other spatial planning documents such as natural (landscape) units. *Higher values presuppose easier and more coordinated development of the territory.*
- **Building authority, registry office, police** - how many municipalities in the relevant territory has the unit.
- **Tourist attractions** - such as a castle, chateau, museum, lookout tower, fortress, caves, rocks, dam, etc. The indicator can be found either from a more detailed map or based on local knowledge of the area. (This is only a list of selected tourist attractions, it is possible depending on the or specific location to customize and list others)

All detected values of indicators need to be compared with other territories. One of the possibilities is always to compare with superior territorial units - district, region, state, or and the EU. However, in the case of indicators for municipalities, it is better to compare with the relevant size group of municipalities (eg a trip to work from a municipality with 100 inhabitants will logically be much higher than in the case of a city with 1 million inhabitants, so it is more accurate to compare similarly large municipalities). At the same time, it is useful to monitor for most values of indicators their development over time. For most indicators, we recommend monitoring the values once a year, in the case of indicators that are only available at the Census, then once every 10 years. We recommend monitoring the longest time series for the number of inhabitants - in the Czech Republic we can use it since 1869, always once every 10 years, up to the level of municipalities, or their parts.